1. List the 5 key facts for the Particle Theory of Matter.

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2. Explain how the Particle Theory of Matter explains why gold and water have different densities.

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3. What is “Archimedes Principle”?

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4. Define density.

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5. Use a fully labeled drawing to explain why an air balloon rises.

6. Explain how you could determine density of salt water.

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1. Explain how the Particle Theory of Matter explains why gold and water have different states of matter at room temperature.

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2. What is “Archimedes Principle”?

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3. Define buoyancy.

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4. Use a fully labeled drawing to explain why a submarine sinks.

6. Explain how you could determine the volume of a block of wood below the water surface if 100 ml of water is displaced.

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1. Explain how the Particle Theory of Matter explains why a liquid is less viscous than a gas when the temperature is increased.

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2. What is “Archimedes Principle”?

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3. Define viscosity.

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4. Use a fully labeled drawing to explain why a boat floats.

5. Calculate the missing densities.

|  |  |  |
| --- | --- | --- |
| Mass (m) | Volume (V) | Density (D) |
| 50 g | 10 ml |  |
| 100 g | 200 ml |  |
| 20 g | 20 cm3 |  |